

Body System: NEUROLOGIC

Session Topic: Headache: Migraine and Tension

Learning Category II – Interactive

Needs Assessment

Headaches are a remarkably common medical complaint from patients of all ages. They are, according to the National Institute of Neurological Disorders and Stroke (NINDS), society's most common form of pain and a frequently cited reason for days missed at school or work.¹ It also accounts for a significant number of visits to health care providers—more than 16% of adults over the age of 18 reported having “severe headache or migraine during the past three months in 2009, according to the *National Health Interview Survey*, and women were more than twice as likely as men to report them.² Family physicians treated patients with headache during 8.3 million visits, and treated patients for migraines during 2 million visits in 2009.³ According to the NINDS, “a headache sufferer usually seeks help from a family practitioner. If the problem is not relieved by standard treatments, the patient may then be referred to a specialist.”¹ Family physicians can help patients to identify the source(s) of their headaches and rule out any underlying or contributing cause.

Evaluating a patient with new onset headache can be challenging. A systematic approach should be used to correctly diagnose and determine the most effective treatment plan. Family physicians should be familiar with common headache disorders, triggers, evaluation methods, indications for referral, and evidence-based approaches to treatment that include both pharmacologic and nonpharmacologic options.⁴⁻⁶ Consultation rates, diagnosis, and treatment rates for migraine have improved over the years, however, low patient satisfaction with migraine management by their family physician should be continues to be a barrier to optimal management and patient adherence to prescribed therapies.^{7,8} Treating migraine headaches can be especially challenging, therefore family physicians should be aware of evidence-based strategies for diagnosis (e.g. POUND), as well as general treatment principles for acute migraine.^{9,10} Additionally, there is some evidence that depression is prevalent among patients who present to a primary care office with a chief complaint of headache.^{11,12} Family physicians should also be able to identify red flags for potentially life threatening causes of headache, obtained through a thorough headache history and performing a focused medical examination.^{13,14}

Being aware of the typical manifestations of different forms of headaches in male and female patients will help family physicians provide an accurate diagnosis and construct an effective care plan. Common treatments include pharmacologic therapies such as prescription or over-the-counter analgesics, nonsteroidal antiinflammatory drugs, or even narcotics, depending on the type of headache. Physicians and patients should work together to identify and eliminate any headache triggers and find a suitable treatment option for pain management.

2013 Scientific Assembly Needs Assessment

Family physicians should be knowledgeable of the following evidence-based guidelines as they develop strategies to manage patients who present with headache:

- Institute for Clinical Systems Improvement (ICSI). Diagnosis and treatment of headache¹⁵
- Evidence-based guidelines for the chiropractic treatment of adults with headache¹⁶
- Evidence-based guideline update: Pharmacologic treatment for episodic migraine prevention in adults¹⁷
- Update: NSAIDs and Other Complementary Treatments for Episodic Migraine Prevention in Adults¹⁸
- Practice parameter: evaluation of children and adolescents with recurrent headaches: report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society¹⁹

Gaps in Knowledge, Competence and/or Performance

- Knowledge gap of evidence-based strategies for the diagnosis and treatment of patients presenting with headache.
- Competence gap exists to identify associated conditions (e.g. depression), and red flags for potentially life threatening causes of headache.
- Competence gap exists to counsel patients on avoiding triggers that cause headache, and to encourage adherence to prescribed treatment strategies.

Learning Objectives:

At the end of this session, participants will be able to:

1. Utilize evidence-based strategies to diagnose patients presenting with headache.
2. Identify associated conditions (e.g. depression), and red flags for potentially life threatening causes of headache.
3. Counsel patients on avoiding triggers that cause headache, and develop a follow-up process that encourages adherence to prescribed treatment strategies.

References:

1. National Institute of Neurological Disease and Stroke (NINDS) NIOHN. Headache: Hope Through Research. 2012; http://www.ninds.nih.gov/disorders/headache/detail_headache.htm. Accessed July, 2012.
2. Pleis JR, Ward BW, Lucas JW. Summary health statistics for U.S. adults: National Health Interview Survey, 2009. *Vital and health statistics. Series 10, Data from the National Health Survey*. Dec 2010(249):1-207.
3. Centers for Disease Control and Prevention (CDC). National Ambulatory Medical Care Survey (NAMCS). 2009; http://www.cdc.gov/nchs/ahcd/web_tables.htm#2009. Accessed July 2012.
4. Kelly RB. Acupuncture for pain. *American family physician*. Sep 1 2009;80(5):481-484.

2013 Scientific Assembly Needs Assessment

5. Maizels M. The patient with daily headaches. *American family physician*. Dec 15 2004;70(12):2299-2306.
6. Chandana SR, Movva S, Arora M, Singh T. Primary brain tumors in adults. *American family physician*. May 15 2008;77(10):1423-1430.
7. Walling AD, Woolley DC, Molgaard C, Kallail KJ. Patient satisfaction with migraine management by family physicians. *The Journal of the American Board of Family Practice / American Board of Family Practice*. Nov-Dec 2005;18(6):563-566.
8. Bigal M, Krymchantowski AV, Lipton RB. Barriers to satisfactory migraine outcomes. What have we learned, where do we stand? *Headache*. Jul 2009;49(7):1028-1041.
9. Gilmore B, Michael M. Treatment of acute migraine headache. *American family physician*. Feb 1 2011;83(3):271-280.
10. Ebell MH. Diagnosis of migraine headache. *American family physician*. Dec 15 2006;74(12):2087-2088.
11. Marlow RA, Kegowicz CL, Starkey KN. Prevalence of depression symptoms in outpatients with a complaint of headache. *Journal of the American Board of Family Medicine : JABFM*. Nov-Dec 2009;22(6):633-637.
12. Janosky JE, South-Paul JE, Lin CJ. Pain and depression in a cohort of underserved, community-dwelling primary care patients. *Journal of the American Board of Family Medicine : JABFM*. May-Jun 2012;25(3):300-307.
13. Clinch CR. Evaluation of acute headaches in adults. *American family physician*. Feb 15 2001;63(4):685-692.
14. Bigal ME, Lipton RB. The differential diagnosis of chronic daily headaches: an algorithm-based approach. *The journal of headache and pain*. Oct 2007;8(5):263-272.
15. National Guideline C. Diagnosis and treatment of headache. <http://www.guideline.gov>. Accessed 7/31/2012.
16. Bryans R, Descarreaux M, Duranleau M, et al. Evidence-based guidelines for the chiropractic treatment of adults with headache. *Journal of manipulative and physiological therapeutics*. Jun 2011;34(5):274-289.
17. Silberstein SD, Holland S, Freitag F, et al. Evidence-based guideline update: pharmacologic treatment for episodic migraine prevention in adults: report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*. Apr 24 2012;78(17):1337-1345.
18. Holland S, Silberstein SD, Freitag F, et al. Evidence-based guideline update: NSAIDs and other complementary treatments for episodic migraine prevention in adults: report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society. *Neurology*. Apr 24 2012;78(17):1346-1353.
19. Lewis DW, Ashwal S, Dahl G, et al. Practice parameter: evaluation of children and adolescents with recurrent headaches: report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. *Neurology*. Aug 27 2002;59(4):490-498.